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APPLICATION N	Ю.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/045,122		11/09/2001	Paul Stypulkowski	11738.00024	2402	
27581	7590	04/28/2006		EXAM	EXAMINER	
MEDTRONIC, INC. 710 MEDTRONIC PARK				SCHAETZLE, KENNEDY		
,		MN 55432-9924		ART UNIT	PAPER NUMBER	
,			3766			
			DATE MAILED: 04/28/2006			

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)				
	Office Action Commence	10/045,122	STYPULKOWSKI, PAUL				
	Office Action Summary	Examiner	Art Unit				
		Kennedy Schaetzle	3766				
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the	correspondence address				
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE of this may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. In period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be solution will apply and will expire SIX (6) MONTHS from the application to become ABANDON	DN. timely filed in the mailing date of this communication. IED (35 U.S.C. § 133).				
Status							
1)⊠	Responsive to communication(s) filed on 14 Fe	ebruary 2006.					
•		action is non-final.					
· —	Since this application is in condition for allowar		rosecution as to the merits is				
,	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims						
-	Claim(s) <u>7-46</u> is/are pending in the application. 4a) Of the above claim(s) <u>15-22,45 and 46</u> is/are withdrawn from consideration.						
	4a) Of the above claim(s) <u>15-22,45 and 46</u> is/are withdrawn from consideration. Claim(s) is/are allowed.						
	Claim(s) <u>7-14 and 23-44</u> is/are rejected.						
7)	Claim(s) is/are objected to.						
,	Claim(s) are subject to restriction and/o	r election requirement					
, —	•	, c.oc.ien requirement					
	on Papers						
• —	The specification is objected to by the Examine						
10)⊠	The drawing(s) filed on <u>09 November 2001</u> is/a						
	Applicant may not request that any objection to the	•					
	Replacement drawing sheet(s) including the correct	-					
11)	The oath or declaration is objected to by the Ex	caminer. Note the attached Office	ce Action or form PTO-152.				
Priority ι	ınder 35 U.S.C. § 119						
,	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document	s have been received.					
* 6	3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
- 8	See the attached detailed Office action for a list	of the certified copies not receive	vea.				
Attachmen	t(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date							
3) 🔲 Inform	e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date		Date I Patent Application (PTO-152)				

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 7-14 and 23-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The reference to at least one switch being configured to simultaneously trigger a plurality of electrodes cannot be found in the original disclosure.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claims 26-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Pohndorf et al. (Pat. No. 4,628,934).

Regarding claim 26, Pohndorf et al. disclose an extension unit (see Fig. 9) comprising input lines (381, 382), output lines (384-387), an array of programmable switches (401-404 and 406-409) connected between one input line and at least a portion of the output lines, wherein the switches are configured to simultaneously trigger a plurality of electrodes via control circuits 388 and 390, whereby the extension unit enables a distant implantable pulse generator having a number of output sources to be

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used with a lead having an electrode array with a number of electrodes greater than the number of output sources.

Regarding the term *distant*, since the applicant has not explicitly defined this term with clarity and precision in the original disclosure, the examiner is at liberty to interpret this term in its broadest reasonable sense. Merriam Webster defines the word *distant* to mean "...1a. separated in space." The pulse generator within the housing 218 is therefore considered to be distant from the spaced extension unit which resides outside of the housing.

Regarding claims 28 and 33, Pohndorf et al. teach that the switches in the programmable array may be bistable magnetic reed switches in col. 10, lines 12-24. Such relay switches are considered to retain their switching state after power has been removed. The devices are in microcircuit form as per col. 9, lines 53-68.

Concerning claims 38 and 39, the examiner considers any magnetically activated switch to be mechanically and magnetically adjustable. The term *adjustable* merely means capable of adjustment.

Regarding claims concerning wave shaping, the examiner considers the electrical paths containing the zener diodes shown in Figs. 3 and 3A to constitute an array of wave shaping circuits, with the diodes inherently shaping the amplitude and frequency of signals received on the output sources in order to attenuate high energy pulses and prevent damage to circuitry.

Response to Arguments

5. Applicant's arguments filed February 14, 2006 have been fully considered but they are not persuasive.

Regarding the rejection of claims 7-14 and 23-25 under §112, 1st paragraph, the applicant argues that paragraph 24 on page 7 of the specification provides support for the claim limitation that requires at least one switch configured to simultaneously trigger a plurality of electrodes (claims 7 and 23). It is stated that the embodiment shown in Fig. 3 can transmit a signal occurring at a switch input to any three output lines, and that

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such an operation necessarily implies that the signal is being transmitted simultaneously.

The examiner considers the above description by the applicant to be a mischaracterization of the invention and conflicts with what one of ordinary skill in the electronic circuitry design art would conclude from Fig. 3 and the associated text. The 1x4 switches 310, 311 and 312 effectively behave as demultiplexers where during any one cycle, an input signal can be routed to any *one* of four outputs depending on the selected address at its control input (thus the 1x2ⁿ designation, where n equals the number of required control selection inputs to selectively and uniquely address each output --in this case, the binary addresses of 00, 01, 10 and 11). The applicant has not disclosed a switch that can simultaneously address multiple outputs or electrodes (for the record, the examiner also disagrees with the applicant's contention that transmission of the input signal involves only *three* switch output lines). Lacking any specific description of a switch capable of simultaneously addressing more than one output at a given time, it is the examiner's position that one of ordinary skill in the art would consider the switches shown in Fig. 3 to behave in a purely conventional manner and thus allow for only one electrode to be selected at a time.

Regarding the rejection of claims 26-44 in view of Pohndorf et al., the applicant's argument centers on the definition of the word *distant*. The applicant states that as used in claim 26, the term means that there must be <u>some</u> space between the extension unit and the implantable generator, and as Pohndorf et al. disclose that the pacer neck 202 is joined to the pacer case 218, <u>no</u> space exists between the two. The applicant further argues that the pacer neck and the pacer case of Pohndorf et al. are not in separate housings and therefore cannot be separated in space.

As repeated above, since the applicant has not explicitly defined the term *distant* with clarity and precision in the original disclosure, the examiner is at liberty to interpret this term in its broadest reasonable sense. Merriam Webster defines the word *distant* to mean "...1a. separated in space." The applicant appears to imply that the word *space* must connote empty space. The examiner considers the term *space* to refer to distance with no connotation as to whether the space is filled or empty (e.g., as in the phrase,

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"...the space between one's ears..."). The pulse generator within the housing 218 is therefore considered to be distant from the spaced extension unit. Whether the pacer neck and the pacer case are a part of the same housing is immaterial to the question at hand since the claims do not require separate housings. The MPEP states:

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Limitations appearing in the specification but not recited in the claim are not read into the claim. E-Pass Techs., Inc. v. 3Com Corp., 343 F.3d 1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir. 2003) (claims must be interpreted "in view of the specification" without importing limitations from the specification into the claims unnecessarily). In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See also In re Zletz, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989).

For the sake of argument, even if this limitation were present in the claims, the examiner would argue that the pacer neck indeed functions as a separate housing to that of the hermetically sealed pacer case. Such arrangements are clearly standard in the pacer arts with an epoxy resin typically employed to form the neck or header and a biocompatible metal employed to form the hermetically-sealed case.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kennedy Schaetzle whose telephone number is 571 272-4954. The examiner can normally be reached on M-W and F from 9:30 -6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert E. Pezzuto can be reached on M-F at 571 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KJS April 24, 2006